

AN ACT

relating to substitution of certain career and technology courses for certain mathematics and science courses otherwise required under the recommended high school program.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 21.044, Education Code, is amended to read as follows:

Sec. 21.044. EDUCATOR PREPARATION. (a) The board shall propose rules establishing the training requirements a person must accomplish to obtain a certificate, enter an internship, or enter an induction-year program. The board shall specify the minimum academic qualifications required for a certificate.

(b) In proposing rules under this section, the board shall specify that to obtain a certificate to teach an "applied STEM course," as that term is defined by Section 28.027, at a secondary school, a person must:

(1) pass the certification test administered by the recognized national or international business and industry group that created the curriculum the applied STEM course is based on; and

(2) have at a minimum:

(A) an associate degree from an accredited institution of higher education; and

(B) three years of work experience in an occupation for which the applied STEM course is intended to prepare

1 the student.

2 SECTION 2. Subchapter B, Chapter 28, Education Code, is  
3 amended by adding Section 28.027 to read as follows:

4 Sec. 28.027. APPLIED SCIENCE, TECHNOLOGY, ENGINEERING, AND  
5 MATHEMATICS COURSES. (a) In this section, "applied STEM course"  
6 means an applied science, technology, engineering, or mathematics  
7 course offered as part of a school district's career and technology  
8 education curriculum.

9 (b) The State Board of Education shall establish a process  
10 under which an applied STEM course may be reviewed and approved for  
11 purposes of satisfying the mathematics and science curriculum  
12 requirements for the recommended high school program imposed under  
13 Section 28.025(b-1)(1)(A) through substitution of the applied STEM  
14 course for a specific mathematics or science course otherwise  
15 required under the recommended high school program and completed  
16 during the student's fourth year of mathematics or science course  
17 work. The State Board of Education may only approve a course to  
18 substitute for a mathematics course taken after successful  
19 completion of Algebra I and geometry and after successful  
20 completion of or concurrently with Algebra II. The State Board of  
21 Education may only approve a course to substitute for a science  
22 course taken after successful completion of biology and chemistry  
23 and after successful completion of or concurrently with physics.

24 (c) The process must provide that an applied STEM course is  
25 entitled to be approved for the purpose described by Subsection (b)  
26 if the course meets the following requirements:

27 (1) the applied STEM course is part of a curriculum

created by a recognized national or international business and industry group to prepare a student for a national or international business and industry certification or license;

(2) the applied STEM course qualifies as:

(A) a dual credit course; or

(B) an articulated postsecondary course provided for local credit or articulated postsecondary advanced technical credit course provided for state credit;

(3) the essential knowledge and skills covered in the applied STEM course are equivalent to the essential knowledge and skills covered in the mathematics or science course for which the applied STEM course is proposed to be approved for substitution; and

(4) the applied STEM course:

(A) provides substantial mathematics content or science content, as applicable, taught in an applied or symbolic format, that enables a student to develop relevant critical thinking skills necessary for preparation for employment or additional training in a career identified by the Texas Workforce Commission as a high-demand or emerging occupation; and

(B) incorporates college and career readiness skills.

(d) If an applied STEM course approved under this section is part of a coherent sequence of career and technology courses, a student is eligible to enroll in the applied STEM course for the purpose described in Subsection (b) only if the student has completed the prerequisite course work, if any, for the applied

1 STEM course.

2 SECTION 3. Subsection (b-2), Section 28.025, Education  
3 Code, is amended to read as follows:

4 (b-2) In adopting rules under Subsection (b-1), the State  
5 Board of Education shall allow a student to comply with the  
6 curriculum requirements for a mathematics course under Subsection  
7 (b-1)(1) taken after the successful completion of Algebra I and  
8 geometry and either after the successful completion of or  
9 concurrently with ~~[an]~~ Algebra II ~~[course]~~ or a science course  
10 under Subsection (b-1)(1) taken after the successful completion of  
11 biology and chemistry and either after the successful completion of  
12 or concurrently with ~~[a]~~ physics ~~[course]~~ by successfully  
13 completing an advanced career and technical course designated by  
14 the State Board of Education as containing substantively similar  
15 and rigorous academic content. A student may use the option  
16 provided by this subsection for not more than two courses.

17 SECTION 4. Subchapter C, Chapter 61, Education Code, is  
18 amended by adding Section 61.0517 to read as follows:

19 Sec. 61.0517. APPLIED STEM COURSES. (a) In this section,  
20 "applied STEM course" means an applied science, technology,  
21 engineering, or mathematics course offered as part of a school  
22 district's career and technology education curriculum and  
23 approved, as provided by Section 28.027, by the State Board of  
24 Education for purposes of satisfying the mathematics and science  
25 curriculum requirements for the recommended high school program  
26 imposed under Section 28.025(b-1)(1)(A).

27 (b) The board shall work with institutions of higher

1 education to ensure that credit for an applied STEM course may be  
2 applied to relevant degree programs offered by institutions of  
3 higher education in this state.

4 (c) The board shall include applied STEM courses in the  
5 board's review of courses considered for approval for offer by a  
6 public junior college or public technical institute.

7 SECTION 5. Not later than September 1, 2012, the  
8 commissioner of education shall establish and implement the process  
9 required by Section 28.027, Education Code, as added by this Act.

10 SECTION 6. This Act takes effect immediately if it receives  
11 a vote of two-thirds of all the members elected to each house, as  
12 provided by Section 39, Article III, Texas Constitution. If this  
13 Act does not receive the vote necessary for immediate effect, this  
14 Act takes effect September 1, 2011.

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President of the Senate

\_\_\_\_\_  
Speaker of the House

I hereby certify that S.B. No. 1620 passed the Senate on April 28, 2011, by the following vote: Yeas 31, Nays 0; and that the Senate concurred in House amendment on May 27, 2011, by the following vote: Yeas 30, Nays 1.

\_\_\_\_\_  
Secretary of the Senate

I hereby certify that S.B. No. 1620 passed the House, with amendment, on May 25, 2011, by the following vote: Yeas 147, Nays 0, one present not voting.

\_\_\_\_\_  
Chief Clerk of the House

Approved:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Governor